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| 10/772,436 | 02/06/2004 | Koichi Shibata | 018987-055 | 6119 |
| 21839 | 7590 | 04/09/2008 | | |
| BUCHANAN, INGERSOLL & ROONEY PC | | | EXAMINER | |
| POST OFFICE BOX 1404 | | | MILIA, MARK R | |
| ALEXANDRIA, VA 22313-1404 | | | ART UNIT | PAPER NUMBER |
| | | | 2625 | |
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| NOTIFICATION DATE | DELIVERY MODE | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

| | | |
|------------------------------|--------------------------------------|---------------------------------------|
| Office Action Summary | Application No. 10/772,436 | Applicant(s) SHIBATA ET AL. |
| | Examiner Mark R. Milia | Art Unit 2625 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-17 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-17 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 06 February 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 2/04/12/16/05.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent Application Publication No. 2004/0070782 to Mihira.

3. Claims 1, 7, and 13 set forth three different hierarchical architectures for the hardware resource, a first control program, a second control program, and an application program. However, Mihira discloses only one hierarchical architecture but Mihira does state that variations and modifications can be made without departing from the scope of the invention (paragraph 212) and it is common in the art to rearrange processing parts without changing the overall function of the system. This is the case with the instant invention in that Mihira discloses a hierarchical architecture that serves the same purpose and functions the same as the hierarchical architectures of claims 1, 7, and 13.

Regarding claim 1, Mihira discloses an image processing apparatus comprising: a hardware resource that includes at least one of an image forming unit, a read unit, and a display unit (see Fig. 1 and paragraph 58), a first control program (see Fig. 1 and paragraph 59), a second control program (see Fig. 1 and paragraph 61), and an application program (see Fig. 1 and paragraph 60), wherein the hardware resource and the programs are arranged in such a hierarchical architecture that the first control program is superordinate to the hardware resource, and the application program and the second control program are superordinate to the first control program (see Fig. 1), the first control program includes a first API (application program interface) for receiving a first request relating to image processing from the second control program and a second request relating to image processing from the application program, and controls, on receiving either of the first and second requests, the hardware resource to perform image processing based on the received request (see paragraphs 59-63, 65, and 71), and the second control program includes a second API publicly released in advance for receiving a third request relating to image processing from an external source, converts the received third request to a command supported by the first API, and passes the command as the first request to the first control program (see paragraphs 60-61, 66-67, 85, and 89-91, the API is publicly released because a network apparatus, such as a host computer receives a list of stored documents and can transmit XML data using a SOAP protocol to perform printing of a stored document).

Regarding claim 7, Mihira discloses an image processing apparatus comprising: a hardware resource that includes at least one of an image forming unit, a read unit,

and a display unit (see Fig. 1 and paragraph 58), a first control program (see Fig. 1 and paragraph 59), a second control program (see Fig. 1 and paragraph 61), and an application program (see Fig. 1 and paragraph 60), wherein the hardware resource and the programs are arranged in a hierarchical architecture in the stated order (see Fig. 1), the first control program includes a first API for receiving a first request relating to image processing from the second control program, and controls the hardware resource to perform image processing based on the received first request (see paragraphs 59-63, 65, and 71), and the second control program includes a second API that is publicly released in advance for receiving a second request relating to image processing from an external source and a third request relating to image processing from the application program, converts, on receiving either of the second and third requests, the received request to a command supported by the first API, and passes the command as the first request to the first control program (see paragraphs 60-61, 66-67, 85, and 89-91, the API is publicly released because a network apparatus, such as a host computer receives a list of stored documents and can transmit XML data using a SOAP protocol to perform printing of a stored document).

Regarding claim 13, Mihira discloses an image processing apparatus comprising: a hardware resource that includes at least one of an image forming unit, a read unit, and a display unit (see Fig. 1 and paragraph 58), a first control program (see Fig. 1 and paragraph 59), a second control program (see Fig. 1 and paragraph 61), and an application program (see Fig. 1 and paragraph 60), wherein the first control program is arranged between the hardware resource and the application program and the second

control program is arranged superordinate to the application program in a hierarchical architecture (see Fig. 1), the first control program includes a first API for receiving a first request relating to image processing from the second control program and a second request relating to image processing from the application program, and controls, on receiving either of the first and second requests, the hardware resource to perform image processing based on the received request (see paragraphs 59-63, 65, and 71), the second control program includes a second API that is publicly released in advance for receiving a third request relating to image processing from an external source, converts the received third request to a command supported by the first API, and passes the command to an appropriate one of the first control program and the application program depending on the requested processing, the command passed to the first control program serving as the first request (see paragraphs 60-61, 66-67, 85, and 89-91, the API is publicly released because a network apparatus, such as a host computer receives a list of stored documents and can transmit XML data using a SOAP protocol to perform printing of a stored document), and on receiving the command from the second control program, the application program passes to the first control program, a request for performing the processing based on the received command, the request passed to the first control program serving as the second request (see paragraphs 58-63, 65-67, 71, 85, and 89-91).

Regarding claim 2, Mihira further discloses wherein the first control program passes the received first request to the application program if the first request is directed to the application program (see paragraphs 58-60 and 63).

Regarding claims 3 and 14, Mihira further discloses wherein the third request is data expressed in an XML (see paragraph 90).

Regarding claims 4, 10, and 15, Mihira further discloses wherein the second control program further includes: a first converting unit for extracting predetermined information from the received XML data (see paragraphs 66-67 and 90) and a second converting unit for converting the extracted information to the command supported by the first API (see paragraphs 97-99 and 102-103).

Regarding claims 5, 11, and 16, Mihira further discloses wherein the hardware resource includes the image forming unit (see Fig. 1 **11**), the requests relate to execution of a print job (see paragraphs 89-90), and on receiving a request relating to execution of the print job, the first control program controls the image forming unit to perform the print job (see paragraphs 97-99 and 102-103).

Regarding claims 6, 12, and 17, Mihira further discloses wherein the hardware resource includes the read unit (see Fig. 1 **12**), the requests relate to execution of a scan job, and on receiving a request relating to execution of the scan job, the first control program controls the read unit to perform the scan job (see paragraphs 58-60, 63, 65, 69, 71, and 80).

Regarding claim 8, Mihira further discloses wherein the second control program passes the received second request to the application program if the second request is directed to the application program (see paragraphs 58-60 and 63).

Regarding claim 9, Mihira further discloses wherein the second request is data expressed in an XML (see paragraph 90).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. To further show the state of the art please refer to the attached Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571)272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached at (571) 272-7437. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark R. Milia
Examiner
Art Unit 2625

/Mark R. Milia/

Examiner, Art Unit 2625/David K Moore/

Supervisory Patent Examiner, Art Unit 2625